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DEPARTMENT OF AGRICULTURE

Cooperative State Research, Education, and Extension Service

ENVIRONMENTAL PROTECTION AGENCY

National Center for Environmental Research

Nutrient Science for Improved Watershed Management Program: Request for Proposals and Request for Input

AGENCY: Cooperative State Research, Education, and Extension Service, USDA and the National Center for Environmental Research, USEPA.

ACTION: Notice of Request for Proposals and Request for Input.

SUMMARY: As a collaborative, interagency effort, the Cooperative State Research, Education, and Extension Service (CSREES) of the U.S. Department of Agriculture (USDA) and the National Center for Environmental Research (NCER) of the U.S. Environmental Protection Agency (USEPA) are soliciting proposals for the Nutrient Science for Improved Watershed Management Program. It is anticipated that the amount available for support of this program in fiscal year (FY) 2002 will be approximately \$7,000,000 (\$4,000,000 from NCER and \$3,000,000 from CSREES). This joint request for proposals (RFP) is soliciting proposals that integrate research and extension activities aimed at addressing nutrient management issues at the watershed scale.

This notice sets out the objectives for the Nutrient Science for Improved Watershed Management Program projects, the eligibility criteria for projects and applicants, the application procedures, and the set of instructions needed to apply for a grant under this RFP.

By this notice, CSREES and NCER additionally solicit stakeholder input from any interested party regarding the FY 2002 Nutrient Science for Improved Watershed Management Program for use in the development of any future RFP's for this program.

DATES: Proposals must be received by close of business (COB) on November 6, 2001 (5:00 p.m. Eastern Time). Proposals received after this date will not be considered for funding. Comments regarding this RFP are requested within six months from the issuance of this notice. Comments received after that date will be considered to the extent practicable.

ADDRESSES: The address for hand-delivered proposals or proposals submitted using an express mail or overnight courier service is: Nutrient Science for Improved Watershed Management; c/o Proposal Services Unit; Cooperative State Research, Education, and Extension Service; U.S. Department of Agriculture; Waterfront Centre, Room 1307; 800 9th Street, S.W.; Washington, D.C. 20024; Telephone: (202)401-5048.

Proposals sent via the U.S. Postal Service must be sent to the following address: Nutrient Science for Improved Watershed Management Program; c/o Proposal Services Unit; Cooperative State Research, Education, and Extension Service; U.S. Department of Agriculture; STOP 2245; 1400 Independence Avenue, S.W.; Washington, D.C. 20250-2245.

Written user comments should be submitted by mail to: Policy and Program Liaison Staff; Office of Extramural Programs; USDA-CSREES; STOP 2299; 1400 Independence Avenue, S.W.; Washington, D.C. 20250-2299; or via e-mail to: RFP-OEP@reeusda.gov. In your comments, please include the name of the program and the fiscal year of the RFP to which you are responding.

FOR FURTHER INFORMATION: Applicants and other interested parties are encouraged to contact Dr. Michael P. O'Neill; National Program Leader for Water Quality; Natural Resources and Environment Unit; Cooperative State Research, Education, and Extension Service; U.S. Department of Agriculture; STOP 2210; 1400 Independence Avenue, S.W.; Washington, D.C. 20250-2210; Telephone: (202) 205-5952; Fax: (202) 401-1706; email: moneill@reeusda.gov; or Ms. Barbara Levinson; National Center for Environmental Research (NCER); U.S. Environmental Protection Agency; 1200 Pennsylvania Avenue, N.W.; Washington, D.C. 20460; Telephone: (202) 564-6911; Fax: (202) 565-2448; e-mail: levinson.barbara@epa.gov.

SUPPLEMENTARY INFORMATION:

Table of Contents

Stakeholder Input

Catalog of Federal Domestic Assistance

Part I--General Information

A. Legislative Authority and Background

B. Purpose, Priorities, and Fund Availability

C. Eligibility

D. Types of Proposals

E. Matching Requirements

F. Funding Restrictions

Part II--Program Description

A. Project Types

B. Program Area Description

Part III--Preparation of a Proposal

A. Program Application Materials

B. Content of Proposals

C. Submission of Proposals

D. Acknowledgment of Proposals

Part IV--Review Process

A. General

B. Evaluation Criteria

C. Conflicts-of-Interest and Confidentiality

Part V--Grant Awards

A. General

B. Funding Mechanisms

C. Organizational Management Information

D. Grant Award Document and Notice of Grant Award

Part VI--Additional Information

A. Access to Review Information

B. Use of Funds; Changes

C. Expected Program Outputs and Reporting Requirements

D. Applicable Federal Statutes and Regulations

E. Confidential Aspects of Proposals and Awards

F. Regulatory Information

Stakeholder Input

CSREES and NCER are soliciting comments regarding this RFP from any interested party. These comments will be considered in the development of any future RFP for the program. Such comments will be used to meet the requirements of section 103(c)(2) of the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA), Pub. L. No. 105-185, as amended (7 U.S.C. 7613(c)(2)). This section requires the Secretary to solicit and consider input on a current RFP from persons who conduct or use agricultural research, education and extension for use in formulating future RFP's for competitive programs. Comments should be submitted as provided for in the **Addresses** and **Dates** portions of this Notice.

Catalog of Federal Domestic Assistance

This program is listed in the Catalog of Federal Domestic Assistance (CFDA) for CSREES under CFDA No. 10.303, Integrated Research, Education, and Extension Competitive Grants Program and for NCER under CFDA No. 66.500, Environmental Protection Consolidated Research.

Part I--General Information

A. Legislative Authority and Background

The funding provided by CSREES for this program is governed by section 406 of AREERA (7 U.S.C. 7626). That section authorized the Secretary of Agriculture to establish an integrated research, education, and extension competitive grants program to provide funding for integrated, multifunctional agricultural research, extension, and education activities. Subject to the availability of appropriations to carry out this program, the Secretary may award grants to colleges and universities (as defined in section 1404 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA), Pub. L. No. 95-113, as amended (7 U.S.C. 3103)) on a competitive basis for integrated research, education, and extension projects. Grants are to be awarded to address priorities in United States agriculture that involve integrated research, education, and extension activities.

CSREES administers the Integrated Research, Education, and Extension Competitive Grants Program by determining priorities in United States agriculture through Agency stakeholder input processes and in consultation with the National Agricultural Research, Extension, Education, and Economics Advisory Board. See 7 U.S.C. 7601(4) and 7626(c). Each RFP for the different program areas (e.g., Water Quality) is developed each fiscal year based on these established priorities and the resulting approaches to solving these critical agricultural issues. Although this overall grant program seeks to solve critical agricultural issues through an integration of research, education, and extension activities, a component of a RFP, depending on the priority being addressed and/or the stage at which the priority is being addressed, may request proposals that are research, education, or extension only, or a combination thereof. However, the overall, overarching approach to solving the critical agricultural issue, priority, or problem will be through an integration of research, education, and extension activities within each individual program area.

For FY 2001, Congress appropriated funds pursuant to section 406 of AREERA to CSREES for an integrated research, education, and extension competitive grants program in seven areas: Water Quality, Food Safety, National Agriculture Pesticide Impact Assessment, Food Quality Protection Act Risk Mitigation for Major Food Crop Systems, Food Quality Protection Act Implementation, Methyl Bromide Transition, and Organic Transition. H.R. Conf. Rep. No. 106-948, at 10-11 (2000). It is anticipated that the same level of funding will be available in FY 2002 for the Water Quality area. The goal of the CSREES Water Quality Program under this authority is to fund appropriate research, extension, and education efforts at the national, regional, state, and local levels necessary to protect or improve the quality of water resources in the United States and its territories, particularly in agriculturally managed watersheds to address the impacts of agricultural activities on those resources. Projects funded by CSREES should contribute to this goal through an integration of research and extension programs in natural or managed agricultural watersheds. The FY 2002 RFP's for the other program areas funded under the AREERA section 406 authority will be published in the Federal Register at a later date.

The funding provided by NCER is governed by separate statutory provisions. The Clean Water Act (CWA) of 1972, Pub. L. No. 92-240, as amended, was passed to restore and maintain the chemical, physical, and biological integrity of the Nations' waters. The Clean Air Act (CAA), Pub. L. No. 88-206, as amended, mandates USEPA to investigate, monitor, assess, and control nitrogen in its various forms. The CAA amendments of 1990, Pub. L. No. 104-316, mandate USEPA to reduce year-round nitrogen loadings to curb effects of acid deposition on aquatic and terrestrial ecosystems. Both Acts authorize research to meet their legislative mandates. Grants by USEPA in this program will be awarded under the authority of section 104 of CWA.

B. Purpose, Priorities, and Fund Availability

Excessive nutrients have been linked to a wide variety of human health and environmental problems. These include lake acidification, soil degradation, hazardous algal blooms, dissolved oxygen problems in coastal waters, and forest declines, among others. If these complex problems are to be addressed, new integrative approaches that consider the management of multiple sources across multiple spatial and temporal scales must be developed and implemented. In order to pro-actively mitigate the nutrient over-enrichment problem, NCER and CSREES have come together to sponsor this solicitation. **The outcome of this research will provide the scientific foundation for improved tools for managing and controlling nutrients by enhancing our understanding of the fate of nutrients from sources (i.e., atmospheric and terrestrial) through biogeochemical cycling in ecosystems to their effects on biological communities.**

An extensive body of literature exists regarding nutrient pollution in the Nation's water bodies. There remains, however, a need to conduct basic research to identify substantial nutrient

sources and processes in the Nation's watersheds at a variety of spatial and temporal scales and across a broad spectrum of geographic locations. Much of the past research focused on the examination of nutrient loads in specific water bodies, such as streams, rivers, lakes, groundwater and estuaries.

However, much of this research has been conducted without detailed documentation of the interactions among terrestrial, atmospheric, and hydrologic components of the nutrient cycle. Moreover, these sources and processes that act to remove nutrients from the watershed system require investigation across entire watersheds at a variety of spatial and temporal scales. Unlike most previous research, new efforts must focus on the integration of nutrient dynamics across a watershed and the evaluation of linkages among sources, processes for removal of nutrients, and the overall quality of water resources in these watersheds.

Similarly, much of the past research focused on the utility of specific management practices to reduce nutrient inputs to streams, lakes, rivers, and groundwater. This work traditionally has been conducted on specific plots or stream reaches. Impacts of different management activities within the sub-basin need to be considered within the context of an entire watershed. Thus, research is needed to establish how land management strategies work to complement or counteract one another within a specific watershed.

Equally important to resolving watershed nutrient pollution is enhancing the community's understanding of environmental issues, building the capacity for communities to address these problems, developing tools, information and data to assist communities in addressing environmental problems, and ensuring communities have access to the most creditable available scientific information. For this competition, the proposals will demonstrate involvement of local governments and/or community groups from inception (developing the research questions and designing the project) to completion of the research project (analyzing and disseminating the results of research). Because nutrient management is fundamentally related to activities that occur in time and space, communication efforts (dissemination of results) that make use of Geographic Information Systems (GIS) or other graphical approaches to convey research findings are especially sought. **All** research projects funded through this solicitation must include innovative efforts to establish effective communication of scientific results to the appropriate audiences through outreach and extension efforts.

CSREES' highest priority is to fund research in agricultural watersheds. NCER's interest lies in multiple use watersheds.

There is no commitment by CSREES or NCER to fund any particular proposal or to make a specific number of awards. It is anticipated that the participating agencies will have a total of approximately \$7 million available for this Program in FY 2002 (\$4 million from NCER and \$3 million from CSREES). CSREES and NCER will fund awards separately.

C. Eligibility

Academic institutions and non-profit organizations are eligible to receive awards through this joint program. Details regarding specific eligibility for the two agencies are presented below.

1. CSREES Funds

The source of CSREES funds for the Nutrient Science for Improved Watershed Management Program is the Integrated Research, Education, and Extension Competitive Grants Program established pursuant to section 406 of AREERA. Under this program, proposals may be submitted by colleges and universities as defined in section 1404 of NARETPA. The terms "college" and "university" mean an educational institution in any State which (1) admits as regular students only persons having a certificate of graduation from a school providing secondary education, or the recognized equivalent of such a certificate, (2) is legally authorized within such State to provide a program of education beyond secondary education, (3) provides an educational program for which a bachelor's degree or any other higher degree is awarded, (4) is a public or other nonprofit institution, and (5) is accredited by a nationally recognized accrediting agency or association. Although an applicant may be eligible based on its status as one of these entities, there are factors which may exclude an applicant from receiving Federal financial and nonfinancial assistance and benefits under this program (e.g., debarment or suspension of an individual involved or a determination that an applicant is not responsible based on submitted organizational management information). Eligible applicants may subcontract to organizations not eligible under these requirements. **Please note that a research foundation maintained by a college or university is not eligible to receive an award under this program. Proposals received from research foundations will not be considered for CSREES funding.**

2. NCER Funds

Academic and not-for-profit institutions located in the United States and state or local governments are eligible for NCER funds under all existing authorizations. Profit-making firms and Federal agencies and national laboratories funded by Federal agencies (e.g., Federally-funded Research and Development Centers (FFRDC's)) are not eligible for NCER funds.

Federal employees are not eligible to serve in a principal leadership role on a grant. FFRDC employees may cooperate or collaborate with eligible applicants within the limits imposed by applicable legislation and regulations (40 CFR 30.20 et seq). They may participate in planning, conducting, and analyzing the research directed by the principal investigator, but may not direct projects on behalf of the applicant organization or principal investigator. The principal investigator's institution may provide funds through its grant from NCER to a FFRDC for research personnel, equipment, and other expenses directly related to research. However, salaries for permanent FFRDC employees may not be provided through this mechanism.

Federal employees may not receive salaries or in other

ways augment their agency's appropriations through grants made by this program. However, Federal employees may interact with grantees so long as their involvement is not essential to achieving the basic goals of the grant. NCER encourages interaction between its own laboratory scientists and grant principal investigators for the sole purpose of exchanging information in research areas of common interest that may add value to their respective research activities. However, this interaction must be incidental to achieving the goals of the research under a grant. Interaction that is "incidental" is not reflected in a research proposal and involves no resource commitments.

The principal investigator's institution may also enter into an agreement with a Federal agency to purchase or utilize unique supplies or services unavailable in the private sector. Examples are the purchase of satellite data, census data tapes, chemical reference standards, analyses, or use of instrumentation or other facilities not available elsewhere, etc. A written justification of Federal involvement must be included in the application, along with an assurance statement from the Federal agency involved which commits it to supply the specified service.

D. Types of Proposals

In FY 2002, it is anticipated that most projects under the Nutrient Science for Improved Watershed Management Program will be submitted as new proposals. However, applicants who applied previously to the Integrated Research, Education, and Extension Competitive Grants Program - Water Quality and were not awarded grants may choose to submit a proposal to the Nutrient Science for Improved Watershed Management Program as a resubmission. Therefore, two types of proposals may be submitted:

(1) New proposal. This is a project proposal that has not been previously submitted to the Integrated Research, Education, and Extension Competitive Grants Program - Water Quality. All new proposals will be reviewed competitively using the selection process and evaluation criteria described in **Part IV--Review Process**.

(2) Resubmitted proposal. This is a proposal that had previously been submitted to the Integrated Research, Education, and Extension Competitive Grants Program - Water Quality but not funded. The resubmitted proposal should clearly indicate the changes that have been made in the project proposal. Further, a clear statement acknowledging comments from the previous reviewers, indicating revisions, rebuttals, etc., can positively influence the review of the proposal. Therefore, for resubmitted proposals, the investigator(s) must respond to the previous panel summary on no more than one page, titled "RESPONSE TO PREVIOUS REVIEW," which is to be placed directly after the Project Summary as described in **Part III--Preparation of a Proposal**. Resubmitted proposals will be reviewed competitively using the selection process and evaluation criteria described in **Part IV--Review Process**.

E. Matching Requirements

1. CSREES Funds

(a) General Requirement

If a grant awarded with CSREES funds provides a particular benefit to a specific agricultural commodity, the grant recipient is required to provide funds or in-kind support to match the amount of the grant funds provided

(7 U.S.C. 7626(d)(1)). See section 13.c. on "Matching Funds" under Part III, B, "Content of Proposals" for more details.

(b) Waiver

CSREES may waive the matching funds requirement specified in the above paragraph for a grant if CSREES determines that (a) the results of the project, while of particular benefit to a specific agricultural commodity, are likely to be applicable to agricultural commodities generally; or (b) the project involves a minor commodity, the project deals with scientifically important research, and the grant recipient is unable to satisfy the matching funds requirement (7 U.S.C. 7626(d)(2)).

2. NCER Funds

NCER does not require matching funds.

F. Funding Restrictions

CSREES and NCER have determined that grant funds awarded under these authorities may not be used for the renovation or refurbishment of research, education, or extension space; the purchase or installation of fixed equipment in such space; or the planning, repair, rehabilitation, acquisition, or construction of buildings or facilities.

Part II--Program Description

A. Project Types

Approximately \$7,000,000 will be available for **Nutrient Science for Improved Watershed Management Program** proposals. The maximum total award is \$750,000, with an annual funding limitation of \$250,000. The project period may be one to three years in duration.

B. Program Area Description

CSREES and NCER seek proposals for research that will provide scientifically defensible methods for integrated management of nutrients within a watershed. The nutrients of interest for this solicitation are nitrogen and phosphorus. The intent of this solicitation is to develop methods suitable for managing watershed nutrients throughout the United States. However, proposals of more limited scope are anticipated. Such proposals are acceptable if they demonstrate "proof of concept" over large watershed areas and if the study design is able to address nutrient issues in disparate ecological settings.

The focus of this research should be on methods to identify and integrate all significant sources and sinks of nutrients within air-sheds and watersheds, across a variety of land cover types and land management activities. Methods are sought that will permit evaluation of linkages among nutrient sources, processes for nutrient removal, and the overall quality of water resources within watersheds. In addition, the research should result in methods for determining how air, water, and land management strategies for managing nutrients complement or negate one another within a specific watershed with respect to meeting water quality objectives. The research

must also provide the basis for, and be integrated with, approaches for communicating results to land managers and the public through outreach and extension efforts. The ultimate focus and application of this research is the management of nutrients across a spectrum of spatial (nested watersheds: small to eco-regional) and temporal (daily, seasonal, inter-annual) scales. Consequently, proposals for research that enable estimation and visualization of the spatial and temporal dynamics of alternative nutrient management options are especially desired.

It is expected that projects will address at least two of the following questions and clearly identify their relationship to a management objective. For example, if the management objective were to calculate the total loading of nutrients into the Everglades from agricultural lands, but instead elucidated the denitrification processes in isolation, the proposal would be non-responsive. The questions are:

(1) What are the sources and magnitudes of nutrients (particularly nitrogen and phosphorous) entering watersheds and how do these sources and magnitudes vary with watershed size (small watershed to ecoregion), geographic location, and position within a watershed?

(2) What processes (ground and surface waters, terrestrial) control the biogeochemical cycling of nutrients to and through an ecosystem and how do these processes vary over space and through time?

(3) How do terrestrial, freshwater, and estuarine communities respond to changes in nutrient loads?

(4) What **land** management activities are responsible for measurable fluxes of nutrients into and out of watersheds and how can these activities be altered to improve the quality of water resources within a watershed?

(5) How do interactions between management practices with competing objectives affect the delivery of nutrients to streams, rivers, lakes, groundwater and estuaries and how can management practices be adapted to better control nutrient delivery across an entire watershed?

In addition to addressing two of the five questions presented above, all projects must include a description of how results will be communicated to land managers and the public through appropriate outreach and extension efforts. Projects also should address how the impacts of these outreach and extension efforts will be assessed in the project.

In research projects in which models are developed or applied, the grantee must provide, as part of the Quality Assurance Statement described in the Standard Instructions, information on how the quality of the data used for or produced by the models will be assured. Special attention to this need should be applied to the six points for consideration in the Quality Assurance Statement. Of particular importance will be the aspects of model development, such as software verification and validation, the need for quality control of data used for modeling, and assurance that information obtained by GIS and/or remote sensing is accurate and verifiable. Reviewers will be asked to critically evaluate this aspect of the

application.

Part III--Preparation of a Proposal

The participating agencies have agreed to use the CSREES guidelines for proposal format (see below) and application kit. Other material may be required at the time of funding to facilitate the implementation of the award. Proposals that are funded by NCER must meet additional submission and reporting requirements at the time of award.

A. Program Application Materials

Program application materials are available at the Integrated Research, Education, and Extension Competitive Grants Program website (<http://www.reeusda.gov/integrated/>). If you do not have access to the CSREES web page or have trouble downloading material, you may contact the Proposal Services Unit, Office of Extramural Programs, USDA/CSREES at (202) 401-5048. When calling the Proposal Services Unit, please indicate that you are requesting forms for the FY 2002 Nutrient Science for Improved Watershed Management Program. These materials may also be requested via Internet by sending a message with your name, mailing address (not e-mail) and phone number to psb@reeusda.gov. State that you want a copy of the Program Description and application materials (orange book) for the Fiscal Year 2002 Nutrient Science for Improved Watershed Management Program.

B. Content of Proposals

1. General

The proposal should follow these guidelines, enabling reviewers to more easily evaluate the merits of each proposal in a systematic, consistent fashion:

(a) The proposal should be prepared on only one side of the page using standard size (8 1/2" x 11") white paper, one inch margins, typed or word processed using no type smaller than 12 point font, and single or double spaced. Use an easily readable font face (e.g., Geneva, Helvetica, Times Roman).

(b) Each page of the proposal, beginning with the Project Description and including the budget pages, required forms, and any appendices, should be numbered sequentially.

(c) The proposal should be stapled in the upper left-hand corner. Do not bind. An original and 14 copies (15 total) must be submitted in one package, along with 10 copies of the "Project Summary" as a separate attachment.

(d) If applicable, proposals should include original illustrations (photographs, color prints, etc.) in all copies of the proposal to prevent loss of meaning through poor quality reproduction.

2. Cover Page (Form CSREES-661)

Each copy of each grant proposal must contain an "Application for Funding", Form CSREES-661. One copy of the application, preferably the original, must contain the pen-and-ink signature(s) of the proposing principal investigator(s)/project director(s)(PI/PD) and the authorized organizational representative who possesses the necessary authority to commit the organization's time and other relevant resources to the project. Any proposed PI/PD or co-PI/PD whose signature does not appear on Form CSREES-661 will

not be listed on any resulting grant award. Complete both signature blocks located at the bottom of the "Application for Funding" form.

Form CSREES-661 serves as a source document for the CSREES grant database; it is therefore important that it be completed accurately. The following items are highlighted as having a high potential for errors or misinterpretations:

(a) Title of Project (Block 6). The title of the project must be brief (140-character maximum), yet represent the major thrust of the effort being proposed. Project titles are read by a variety of nonscientific people; therefore, highly technical words or phraseology should be avoided where possible. In addition, introductory phrases such as "investigation of," "research on," "education for," or "outreach that" should not be used.

(b) Program to Which You Are Applying (Block 7). "Nutrient Science for Improved Watershed Management Program."

(c) Type of Award Request (Block 13). Check the block for "new" or "resubmission."

(d) Principal Investigator(s)/Project Director(s) (PI/PD) (Block 15). The designation of excessive numbers of co-PI/PD's creates problems during final review and award processing. Listing multiple co-PI/PD's, beyond those required for genuine collaboration, is therefore discouraged. Note that providing a Social Security Number is voluntary, but is an integral part of the CSREES information system and will assist in the processing of the proposal.

(e) Type of Performing Organization (Block 18). A check should be placed in the box beside the type of organization which actually will carry out the effort. For example, if the proposal is being submitted by an 1862 Land-Grant Institution but the work will be performed in a department, laboratory, or other organizational unit of an agricultural experiment station, box "03" should be checked. If portions of the effort are to be performed in several departments, check the box that applies to the individual listed as PI/PD #1 in Block 15.a.

(f) Other Possible Sponsors (Block 22). List the names or acronyms of all other public or private sponsors including other agencies within USDA or USEPA and other programs funded by CSREES or NCER to whom your application has been or might be sent. In the event you decide to send your application to another organization or agency at a later date, you must inform the identified CSREES Program Director as soon as practicable. Submitting your proposal to other potential sponsors will not prejudice its review by CSREES or NCER; however, duplicate support for the same project will not be provided. Complete the "Application for Funding," Form CSREES-661, in its entirety.

(g) One copy of the "Application for Funding" form must contain the signatures of the PI/PD(s) and authorized organizational representative for the applicant organization.

3. Table of Contents

For consistency and ease in locating information, each proposal must contain a detailed Table of Contents just after the cover page. The Table of Contents should contain page numbers for each component of the proposal. Page numbers should begin with the first page of the Project Description.

4. Project Summary

The proposal must contain a Project Summary of 250 words or less on a separate page which should be placed immediately after the Table of Contents and should not be numbered. The names and affiliated organizations of all PI/PD's and co-PI/PD's should be listed on this form, in addition to the title of the project. The summary should be a self-contained, specific description of the activity to be undertaken and should focus on: overall project goal(s) and supporting objectives; plans to accomplish project goal(s); and relevance of the project to regional, State, or local water quality efforts aimed at addressing nutrient management issues at the watershed. The importance of a concise, informative Project Summary cannot be overemphasized.

5. Response to Previous Review

This requirement only applies to "Resubmitted Proposals" as described under Part I, D, "Types of Proposals." For these proposals, the investigator(s) must respond to the previous panel summary on no more than one page, titled "RESPONSE TO PREVIOUS REVIEW," which is to be placed directly after the Project Summary. If desired, additional comments and responses to the previous panel summary may be included in the text of the Project Description, subject to the page limitation.

6. Project Description

The project description may not exceed 15 single- or double-spaced pages of written text and may not exceed a total of 20 pages after inclusion of figures and tables.

The Project Description must include all of the following:

a. Introduction: A clear statement of the long-term goal(s) and supporting objectives of the proposed activities should be included. Summarize the body of knowledge or other past activities which substantiate the need for the proposed project. Describe ongoing or recently completed significant activities related to the proposed project including the work of key project personnel. Preliminary data/information pertinent to the proposed project should be included. In addition, this section should include in-depth information on the following, when applicable:

- (1) Estimates of the magnitude of the issues and their relevance to stakeholders, land managers, and the public;
- (2) Role of the stakeholders in problem identification, planning, and implementation and evaluation as appropriate; and
- (3) Reasons for having the work performed at the proposing institution.

b. Objectives: Clear, concise, complete, and logically arranged statement(s) of specific aims of the proposed effort

must be included in all proposals.

Projects should address at least two of the six questions identified in **Part II, B, "Program Area Description"** and clearly identify their relationship to the stated management objectives.

c. Methods: The procedures or methodology to be applied to the proposed effort should be explicitly stated. This section should include but not necessarily be limited to:

- (1) A description of stakeholder involvement in problem identification, planning, implementation and evaluation;
- (2) A description of the proposed project activities in the sequence in which it is planned to carry them out;
- (3) Techniques to be employed, including their feasibility and rationale for their use in this project;
- (4) Kinds of results expected;
- (5) Means by which extension and outreach activities will be evaluated;
- (6) Means by which data will be analyzed or interpreted;
- (7) Details of plans to communicate results to stakeholders, land managers and the public;
- (8) Pitfalls that might be encountered; and
- (9) Limitations to proposed procedures.

d. Cooperation and Institutional Units Involved:

Cooperative, multi-institutional and multi-disciplinary applications are encouraged. Identify each institutional unit contributing to the project and designate the lead institution or institutional unit. Clearly define the roles and responsibilities of each institutional partner of the project team.

e. Facilities and Equipment: All facilities which are available for use or assignment to the project during the requested period of support should be reported and described briefly. All items of major equipment or instrumentation available for use or assignment to the proposed project should be itemized. In addition, items of nonexpendable equipment needed to conduct and bring the project to a successful conclusion should be listed, including dollar amounts and, if funds are requested for their acquisition, justified.

f. Project Timetable: The proposal should outline all important phases as a function of time, year by year, for the entire project, including periods beyond the grant funding period.

7. References

All references cited should be complete, including titles and all co-authors, and should conform to an accepted journal format.

8. Appendices to Project Description

Appendices to the Project Description are allowed if they are directly germane to the proposed project and are limited to a total of two of the following: reprints (papers that have been published in peer reviewed journals) and preprints (manuscripts in press for a peer reviewed journal; these must be accompanied by a letter of acceptance from the publishing

journal).

9. Quality Assurance Statement

For any project involving data collection or processing, conducting surveys, environmental measurements, and/or modeling, or the development of environmental technology (whether hardware-based or via new techniques) for pollution control and waste treatment, provide a statement on quality processes that will be used to assure that results of the research satisfy the intended project objectives. The statement must describe a quality system that complies with the requirements of ANSI/ASQC E4, Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs, and must not exceed two consecutively numbered, 8.5x11-inch pages of single-spaced standard 12-point type with 1-inch margins. This Statement should, for each item listed below, present the required information, reference the specific page and paragraph number of the Research Plan containing the information, or provide a justification as to why the item does not apply to the proposed research:

a. Discuss the activities to be performed or hypothesis to be tested and criteria for determining acceptable data quality. (Note: Such criteria may be expressed in terms of precision, accuracy, representativeness, completeness, and comparability or in terms of data quality objectives or acceptance criteria. Furthermore, these criteria must also be applied to determine the acceptability of existing or secondary data to be used in the project. In this context secondary data may be defined as data previously collected for other purposes or from other sources, including the literature, compilations from computerized data bases, or results from models of environmental processes and conditions.)

b. Describe the study design, including sample type and location requirements, all statistical analyses that were or will be used to estimate the types and numbers of physical samples required, or equivalent information for studies using survey and interview techniques.

c. Describe the procedures for the handling and custody of samples, including sample collection, identification, preservation, transportation, and storage.

d. Describe the procedures that will be used in the calibration and performance evaluation of all analytical instrumentation and all methods of analysis to be used during the project. Explain how the effectiveness of any new technology will be measured and how it will be benchmarked to improve existing processes, such as those used by industry.

e. Discuss the procedures for data reduction and reporting, including a description of all statistical methods, with reference to any statistical software to be used, to make inferences and conclusions; discuss any computer models to be designed or utilized with associated verification and validation techniques.

f. Describe the quantitative and/or qualitative procedures that will be used to evaluate the success of the project, including any plans for peer or other reviews of the study design or analytical methods prior to data collection.

ANSI/ASQC E4, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," is available for purchase from the American Society for Quality, phone 1-800-248-1946, item T55. Only in exceptional circumstances should it be necessary to consult this document. A USEPA guidance document, Guidance on Satisfying EPA Quality System Requirements for STAR Grants (EPA QA/G-1STAR) is available for potential applicants which addresses in detail how to comply with ANSI/ASQC E4 for STAR grants. This may be found on the Internet at <http://www.epa.gov/ncerqa>.

10. Key Personnel

The following should be included, as applicable:

(a) The roles and responsibilities of each PI/PD and/or collaborator should be clearly described;

(b) An estimate of the time commitment involved for each PI/PD and/or collaborator, including current and pending projects; and

(c) Vitae of each PI/PD, senior associate, and other professional personnel. This section should include vitae of all key persons who are expected to work on the project, whether or not Federal grant funds are sought for their support. The vitae should be limited to two (2) pages each in length, excluding publications listings. A chronological list of all publications in refereed journals during the past four (4) years, including those in press, must be provided for each professional project member for whom a curriculum vitae is provided. Also list only those non-refereed publications that have relevance to the proposed project. All authors should be listed in the same order as they appear on each paper cited, along with the title and complete reference as these usually appear in journals.

11. Conflict-of-Interest List

A Conflict-of-Interest List must be provided for all individuals involved in the project (i.e., each individual submitting a vitae in response to item 10.(c) of this part). Each list should be on a separate page and include alphabetically the full names of the individuals in the following categories: (a) All collaborators on projects within the past four years, including current and planned collaborations; (b) all co-authors on publications within the past four years, including pending publications and submissions; (c) all persons in your field with whom you have had a consulting or financial arrangement within the past four years, who stand to gain by seeing the project funded; and (d) all thesis or postdoctoral advisees/advisors within the past four years (some may wish to call these life-time conflicts). This form is necessary to assist program staff in excluding from proposal review those individuals who have conflicts-of-interest with the personnel in the grant proposal. The Program Director must be informed of any additional conflicts-of-interest that arise after the proposal

is submitted.

12. Collaborative and/or Subcontractual Arrangements

If it will be necessary to enter into formal consulting or collaborative arrangements with others, such arrangements should be fully explained and justified. In addition, evidence should be provided that the collaborators involved have agreed to render these services. If the need for consultant services is anticipated, the proposal narrative should provide a justification for the use of such services, a statement of work to be performed, a resume or curriculum vita for each consultant, and rate of pay for each consultant. For purposes of proposal development, informal day-to-day contacts between key project personnel and outside experts are not considered to be collaborative arrangements and thus do not need to be detailed.

All anticipated subcontractual arrangements also should be explained and justified in this section. A proposed statement of work and a budget for each arrangement involving the transfer of substantive programmatic work or the providing of financial assistance to a third party must be provided. Agreements between departments or other units of your own institution and minor arrangements with entities outside of your institution (e.g., requests for outside laboratory analyses) are excluded from this requirement.

If you expect to enter into subcontractual arrangements, please note that the provisions contained in 7 CFR Part 3019, USDA Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations, and the general provisions contained in 7 CFR 3015.205, part of the USDA Uniform Federal Assistance Regulations, flow down to subrecipients. In addition, required clauses from Sections 3019.40 - .48 ("Procurement Standards") and Appendix A ("Contract Provisions") of 7 CFR Part 3019 should be included in final contractual documents, and it is necessary for the subawardee to make a certification relating to debarment/suspension.

13. Budget (Form CSREES-55)

a. Budget Form

Prepare the budget, Form CSREES-55, in accordance with instructions provided. A budget form is required for each year of requested support. In addition, a cumulative budget is required detailing the requested total support for the overall project period. The budget form may be reproduced as needed by applicants. Funds may be requested under any of the categories listed on the form, provided that the item or service for which support is requested is allowable under the authorizing legislation, the applicable Federal cost principles, and these program guidelines, and can be justified as necessary for the successful conduct of the proposed project. Applicants must also include a budget narrative to justify their budgets (see section b below.)

The following guidelines should be used in developing your proposal budget(s):

1. Salaries and Wages. Salaries and wages are allowable charges and may be requested for personnel who will be working on the project in proportion to the time such personnel will devote to the project. If salary funds are requested, the number of Senior and Other Personnel and the number of CSREES/NCER-Funded Work Months must be shown in the spaces provided. Grant funds may not be used to augment the total salary or rate of salary of project personnel or to reimburse them for time in addition to a regular full-time salary covering the same general period of employment. Salary funds requested must be consistent with the normal policies of the institution.

2. Fringe Benefits. Funds may be requested for fringe benefit costs if the usual accounting practices of your organization provide that organizational contributions to employee benefits (e.g., social security and retirement) be treated as direct costs. Fringe benefit costs may be included only for those personnel whose salaries are charged as a direct cost to the project.

3. Nonexpendable Equipment. Nonexpendable equipment means tangible nonexpendable personal property including exempt property charged directly to the award having a useful life of more than one year and an acquisition cost of \$5,000 (or lower depending on institutional policy) or more per unit. As such, items of necessary instrumentation or other nonexpendable equipment should be listed individually by description and estimated cost in the budget narrative. This applies to revised budgets as well, as the equipment item(s) and amount(s) may change.

4. Materials and Supplies. The types of expendable materials and supplies which are required to carry out the project should be indicated in general terms with estimated costs in the budget narrative.

5. Travel. The type and extent of travel and its relationship to project objectives should be described briefly and justified. If travel is proposed, the destination, the specific purpose of the travel, a brief itinerary, inclusive dates of travel, and estimated cost must be provided for each trip. Airfare allowances normally will not exceed round-trip jet economy air accommodations. U.S. flag carriers must be used when available. See 7 CFR 3015.205(b)(4) for further guidance.

6. Publication Costs/Page Charges. Include anticipated costs associated with publications in a journal (preparing and publishing results including page charges, necessary illustrations, and the cost of a reasonable number of coverless reprints) and audio-visual materials that will be produced. Photocopying and printing brochures, etc., should be shown in Section I., "All Other Direct Costs" of Form CSREES-55.

7. Computer (ADPE) Costs. Reimbursement for the costs of using specialized facilities (such as a university- or department-controlled computer mainframe or data processing center) may be requested if such services are required for completion of the work.

8. All Other Direct Costs. Anticipated direct project

charges not included in other budget categories must be itemized with estimated costs and justified in the budget narrative. This also applies to revised budgets, as the item(s) and dollar amount(s) may change. Examples may include space rental at remote locations, subcontractual costs, and charges for consulting services, telephone, facsimile, shipping costs, and fees necessary for laboratory analyses. You are encouraged to consult the "Instructions for Completing Form CSREES-55, Budget," of the Application Kit for detailed guidance relating to this budget category. Form AD-1048 must be completed by each subcontractor or consultant and retained by the grantee.

9. Indirect Costs. When submitting a proposal, institutions should use their current Federal negotiated rate for indirect costs. Please note that pursuant to section 1462 of NARETPA (7 U.S.C. 3310), indirect costs for all competitive proposals funded by CSREES are capped at 19% of total Federal funds provided under the award. Therefore, awards made by CSREES for the Nutrient Science for Improved Watershed Management Program are subject to the 19% indirect costs limitation. (This limitation also applies to the recovery of indirect costs by any subawardee or subcontractor, and should be reflected in the subrecipient budget.) A method for calculating the maximum allowable amount of indirect costs for an CSREES award is by multiplying total direct costs by 0.23456. To accommodate the differences in allowable indirect costs between CSREES and NCER, the applicant may be required at the time of award to submit a separate budget with indirect cost rates appropriate to each agency. If no rate has been negotiated, a reasonable dollar amount (equivalent to or less than 19% of total Federal funds requested) in lieu of indirect costs may be requested, subject to approval by CSREES.

b. Budget Narrative

All budget categories, excluding Indirect Costs, for which support is requested, must be individually listed (with costs) in the same order as the budget and justified on a separate sheet of paper which should be placed immediately behind the Budget Form. For grants awarded with CSREES funds, explanations of matching funds or the lack thereof on commodity-specific projects also are to be included in this section.

c. Matching Funds

If a grant awarded with CSREES funds provides a particular benefit to a specific agricultural commodity, the grant recipient is required to provide funds or in-kind support to match the amount of grant funds provided.

If an applicant for CSREES funds concludes that matching funds are not required as specified under Part I, E, "Matching Requirements," a justification should be included in the budget narrative. CSREES will consider this justification when ascertaining final matching requirements or in determining if required matching can be waived. See Section E1(b) of Part I--General Information. CSREES retains the right to make final determinations regarding matching requirements.

For those grants requiring matching funds as specified under Part I, E, proposals should include written verification of commitments of matching support (including both cash and in-kind contributions) from third parties. Written verification means:

(a) For any third party cash contributions, a separate pledge agreement for each donation, signed by the authorized organizational representatives of the donor organization and the applicant organization, which must include: (1) the name, address, and telephone number of the donor; (2) the name of the applicant organization; (3) the title of the project for which the donation is made; (4) the dollar amount of the cash donation; and (5) a statement that the donor will pay the cash contribution during the grant period; and

(b) For any third party in-kind contributions, a separate pledge agreement for each contribution, signed by the authorized organizational representatives of the donor organization and the applicant organization, which must include: (1) the name, address, and telephone number of the donor; (2) the name of the applicant organization; (3) the title of the project for which the donation is made; (4) a good faith estimate of the current fair market value of the third party in-kind contribution; and (5) a statement that the donor will make the contribution during the grant period.

The sources and amount of all matching support from outside the applicant institution should be summarized on a separate page and placed in the proposal immediately following the budget narrative. All pledge agreements must be placed in the proposal immediately following the summary of matching support.

The value of applicant contributions to the project shall be established in accordance with applicable cost principles. Applicants should refer to OMB Circular A-21, Cost Principles for Educational Institutions, for further guidance and other requirements relating to matching and allowable costs.

Although NCER does not require matching funds, proposed budgets should provide matching funds (when applicable) so that awards will not be delayed should CSREES be the Funding Agency.

14. Current and Pending Support (Form CSREES-663)

All proposals must contain Form CSREES-663 listing other current public or private support (including in-house support) to which personnel (i.e., individuals submitting a vitae in response to 10.(c) of this subpart) identified in the proposal have committed portions of their time, whether or not salary support for person(s) involved is included in the budget. Analogous information must be provided for any pending proposals that are being considered by, or that will be submitted in the near future to, other possible sponsors, including other USDA and USEPA Programs or agencies. Concurrent submission of identical or similar proposals to possible sponsors will not prejudice proposal review or evaluation by CSREES and NCER for this purpose. However, a proposal that duplicates or overlaps substantially with a proposal already reviewed and funded (or to be funded) by

another organization or agency will not be funded under this program. Note that the project being proposed should be included in the pending section of the form.

15. Assurance Statement(s), (Form CSREES-662)

A number of situations encountered in the conduct of projects require special assurances, supporting documentation, etc., before funding can be approved for the project. In addition to any other situation that may exist with regard to a particular project, it is expected that some applications submitted in response to these guidelines will involve the following:

a. Recombinant DNA or RNA Research

As stated in 7 CFR 3015.205 (b)(3), all key personnel identified in the proposal and all endorsing officials of the proposing organization are required to comply with the guidelines established by the National Institutes of Health entitled, "Guidelines for Research Involving Recombinant DNA Molecules," as revised. If your project proposes to use recombinant DNA or RNA techniques, you must so indicate by checking the "yes" box in Block 19 of Form CSREES-661 (the Cover Page) and by completing Section A of Form CSREES-662. For applicable proposals recommended for funding, Institutional Biosafety Committee approval is required before CSREES or NCER funds will be released.

b. Animal Care

Responsibility for the humane care and treatment of live vertebrate animals used in any grant project supported with funds provided by CSREES or NCER rests with the performing organization. Where a project involves the use of living vertebrate animals for experimental purposes, all key project personnel identified in a proposal and all endorsing officials of the proposing organization are required to comply with the applicable provisions of the Animal Welfare Act of 1966, Pub. L. No. 89-544, as amended (7 U.S.C. 2131 et seq.), and the regulations promulgated thereunder by the Secretary of USDA in 9 CFR Parts 1, 2, 3, and 4 pertaining to the care, handling, and treatment of these animals. If your project will involve these animals, you should check "yes" in block 20 of Form CSREES-661 and complete Section B of Form CSREES-662. In the event a project involving the use of live vertebrate animals results in a grant award, funds will be released only after the Institutional Animal Care and Use Committee has approved the project.

c. Protection of Human Subjects

Responsibility for safeguarding the rights and welfare of human subjects used in any grant project supported with funds provided by CSREES or NCER rests with the performing organization. Guidance on this issue is contained in the National Research Act, Pub. L. No. 93-348, as amended, and implementing regulations promulgated by the Department under 7 CFR Part 1c. If you propose to use human subjects for experimental purposes in your project, you should check the "yes" box in Block 21 of Form CSREES-661 and complete Section C of Form CSREES-662. In the event a project involving human subjects results in a grant award, funds will be released

only after the appropriate Institutional Review Board has approved the project.

16. Certifications

Note that by signing Form CSREES-661 the applicant is providing the certifications required by 7 CFR Part 3017, as amended, regarding Debarment and Suspension and Drug-Free Workplaces, and 7 CFR Part 3018, regarding Lobbying. The certification forms are included in the application package for informational purposes only. These forms should not be submitted with the proposal since by signing Form CSREES-661 your organization is providing the required certifications. If the project will involve a subcontractor or consultant, the subcontractor/consultant should submit a Form AD-1048 to the grantee organization for retention in their records. This form should not be submitted with the application.

17. Compliance with the National Environmental Policy Act (NEPA) (Form CSREES-1234)

As outlined in 7 CFR Part 3407 (i.e., the Cooperative State Research, Education, and Extension Service regulations implementing NEPA, Pub. L. No. 91-190, as amended), the environmental data for any proposed project is to be provided to CSREES so that the cooperating agencies may determine whether any further action is needed. In some cases, however, the preparation of environmental data may not be required. Certain categories of actions are excluded from the requirements of NEPA.

In order for CSREES to determine whether any further action is needed with respect to NEPA, pertinent information regarding the possible environmental impacts of a particular project is necessary; therefore, Form CSREES-1234, "NEPA Exclusions Form," must be included in the proposal indicating whether the applicant is of the opinion that the project falls within a categorical exclusion and the reasons therefore. If it is the applicant's opinion that the proposed project falls within the categorical exclusions, the specific exclusion must be identified. Form CSREES-1234 and supporting documentation should be included as the last page of this proposal.

Even though a project may fall within the categorical exclusions, the agencies may determine that an Environmental Assessment or an Environmental Impact Statement is necessary for an activity, if substantial controversy on environmental grounds exists or if other extraordinary conditions or circumstances are present which may cause such activity to have a significant environmental effect.

The USEPA regulations implementing NEPA are found in 40 CFR Part 6, Subpart G.

C. Submission of Proposals

1. When to Submit (Deadline Date)

Proposals must be received by COB on November 6, 2001 (5:00 p.m. Eastern Time). Proposals received after this date will not be considered for funding.

2. What to Submit

An original and 14 copies must be submitted. In addition submit 10 copies of the proposal's Project Summary.

All copies of the proposals and the Project Summaries must be submitted in one package.

3. Where to Submit

Applicants are strongly encouraged to submit completed proposals via overnight mail or delivery service to ensure timely receipt by CSREES. The address for hand-delivered proposals or proposals submitted using an express mail or overnight courier service is: Nutrient Science for Improved Watershed Management Program; c/o Proposal Services Unit; Cooperative State Research, Education, and Extension Service; U.S. Department of Agriculture; Waterfront Center, Room 1307; 800 9th Street, S.W.; Washington, D.C. 20024;

Telephone: (202) 401-5048.

Proposals sent via the U.S. Postal Service must be sent to the following address: Nutrient Science for Improved Watershed Management Program; c/o Proposal Services Unit; Cooperative State Research, Education, and Extension Service; U.S. Department of Agriculture; STOP 2245; 1400 Independence Avenue, S.W.; Washington, D.C. 20250-2245.

D. Acknowledgment of Proposals

The receipt of all proposals will be acknowledged by e-mail. Therefore, applicants are strongly encouraged to provide e-mail addresses, where designated, on the Form CSREES-661. If the applicant's e-mail address is not indicated, CSREES will acknowledge receipt of proposal by letter.

Once the proposal has been assigned an identification number, please cite that number on all future correspondence. If the applicant does not receive an acknowledgment within 60 days of the submission deadline, please contact the Program Director.

Part IV--Review Process

A. General

Each proposal will be evaluated in a multi-part process. First, each proposal will be screened to ensure that it meets the administrative requirements as set forth in this request for proposals. Second, proposals that meet these requirements will be technically evaluated by a peer review panel.

Peer review panel members will be selected based upon their training and experience in relevant scientific, education or extension fields taking into account the following factors: (a) the level of formal scientific, technical education, and extension experience of the individual, as well as the extent to which an individual is engaged in relevant research, education and/or extension activities; (b) the need to include as peer reviewers experts from various areas of specialization within relevant scientific, education, and extension fields; (c) the need to include as reviewers other experts (e.g., producers, range or forest managers/operators, and consumers) who can assess the relevance of the proposals to targeted audiences and to program needs; (d) the need to include as peer reviewers experts from a variety of organizational types (e.g., colleges, universities, industry, state and Federal agencies, private profit

and non-profit organizations), and geographic locations; (e) the need to maintain a balanced composition of peer review groups with regard to minority and female representation and an equitable age distribution; and (f) the need to include members that can judge the effective usefulness to producers and the general public of each proposal.

Proposals rated highly by the peer reviewers are subjected to a programmatic review within the agencies to assure a balanced research portfolio. Proposals are selected for award on the basis of agency goals, technical merit, relevancy to agency research priorities, program balance, and budget.

B. Evaluation Criteria

Technical merit and relevance to program goals and potential impact will be evaluated for each proposal. Proposals must show evidence of strength in each of these areas to be rated highly for funding. Specific criteria for these proposal attributes are listed below.

(1) Technical merit of all aspects of the proposal, including research and extension components.

- (a) Conceptual adequacy of overall approach;
- (b) Extent to which proposed work addresses identified stakeholder needs;
- (c) Conceptual adequacy of hypothesis or hypotheses on which plan is based;
- (d) Suitability and feasibility of the methodology for conducting the work;
- (e) Time allocated for attainment of objectives;
- (f) Qualifications of project personnel;
- (g) Institutional experience and competence in the identified area of work;
- (h) Adequacy of available support personnel, equipment, and facilities;
- (i) Extent to which proposed work integrates research with extension and outreach programs;
- (j) Suitability and feasibility of the methodology for evaluating the effectiveness of extension and outreach activities; and
- (k) Appropriateness of the Quality Assurance Plan outlined above (III.B.9).

(2) Relevancy to Program Goals and Potential Impact.

- (a) Relationship of project objectives to national issues and objectives;
- (b) Regional or national magnitude of problem addressed;
- (c) Applicability to other watersheds or regions;
- (d) Evidence of partnerships with other disciplines and institutions;
- (e) Extent to which end users are involved in problem identification, planning, implementation and evaluation;
- (f) Probability of success of the project; and
- (g) Extent to which potential impact can be

documented.

C. Conflicts-of-Interest and Confidentiality

During the peer evaluation process, extreme care will be taken to prevent any actual or perceived conflicts-of-interest that may impact review or evaluation. For the purpose of determining conflicts-of-interest, the academic and administrative autonomy of an institution shall be determined by reference to the 2000 Higher Education Directory, published by Higher Education Publications, Inc., 6400 Arlington Boulevard, Suite 648, Falls Church, Virginia 22042. Phone: (703) 532-2305.

Names of submitting institutions and individuals, as well as proposal content and peer evaluations, will be kept confidential, except to those involved in the review process, to the extent permitted by law. In addition, the identities of peer reviewers will remain confidential throughout the entire review process. Therefore, the names of the reviewers will not be released to applicants. At the end of the fiscal year, names of panelists will be made available in such a way that the panelists cannot be identified with the review of any particular proposal.

Part V--Grant Awards

The Nutrient Science for Improved Watershed Management Program will be administered and managed as an interagency program involving both participating agencies throughout the entire process from development of the program announcement to the review, selection, and monitoring of awards. The interagency program managers will coordinate program administration activities such as review of periodic reporting of project evaluations and annual investigator team meetings.

CSREES and NCER will fund awards separately. The amount of each award will be determined jointly by CSREES and NCER and their representatives after the panel review process has been completed. Other material may be required prior to funding to facilitate the implementation of the award from participating agencies.

A. General

Within the limit of funds available for such purpose, the awarding official shall make grants to those responsible, eligible applicants whose proposals are judged most meritorious under the procedures set forth in this RFP. The date specified by the awarding official as the effective date of the grant shall be no later than September 30 of the Federal fiscal year in which the project is approved for support and funds are appropriated for such purpose, unless otherwise permitted by law. It should be noted that the project need not be initiated on the grant effective date, but as soon thereafter as practical so that project goals may be attained within the funded project period. All funds granted under this RFP shall be expended solely for the purpose for which the funds are granted in accordance with the approved application and budget, the regulations, the terms and conditions of the award, the applicable Federal cost principles, and the applicable participating agency assistance

regulations.

B. Funding Mechanisms

The two mechanisms by which grants may be awarded are as follows:

(1) Standard grant. This is a funding mechanism whereby the Federal government agrees to support a specified level of effort for a predetermined time period without the announced intention of providing additional support at a future date.

(2) Continuation grant. This is a funding mechanism whereby the Federal government agrees to support a specified level of effort for a predetermined period of time with a statement of intention to provide additional support at a future date, provided that performance has been satisfactory, appropriations are available for this purpose, and continued support will be in the best interests of the Federal government and the public. This kind of mechanism normally will be awarded for an initial one-year period, and any subsequent continuation project grants will be awarded in one-year increments. The award of a continuation project grant to fund an initial or succeeding budget period does not constitute an obligation to fund any subsequent budget period. Unless prescribed otherwise by CSREES or NCER, a grantee must submit a separate application for continued support for each subsequent fiscal year. Requests for such continued support must be submitted in duplicate at least three months prior to the expiration date of the budget period currently being funded. Decisions regarding continued support and the actual funding levels of such support in future years usually will be made administratively after consideration of such factors as the grantee's progress and management practices and the availability of funds. Since initial peer reviews are based upon the full term and scope of the original application, additional evaluations of this type generally are not required prior to successive years' support. However, in unusual cases (e.g., when the nature of the project or key personnel change or when the amount of future support requested substantially exceeds the grant application originally reviewed and approved), additional reviews may be required prior to approving continued funding.

C. Organizational Management Information

Specific management information relating to an applicant shall be submitted on a one-time basis as part of the responsibility determination prior to the award of a grant identified under this RFP, if such information has not been provided previously under this or another program for which the sponsoring agency is responsible. Copies of forms recommended for use in fulfilling the requirements contained in this section will be provided by the awarding agency as part of the preaward process.

D. Grant Award Document and Notice of Grant Award

The grant award document shall include at a minimum the following:

(1) Legal name and address of performing organization or institution to whom the Agency has awarded a

grant under the terms of this request for proposals;

(2) Title of project;

(3) Name(s) and address(es) of PI/PD's chosen to direct and control approved activities;

(4) Identifying grant number assigned by the Funding Agency;

(5) Project period, specifying the amount of time the Funding Agency intends to support the project without requiring recompetition for funds;

(6) Total amount of financial assistance approved by the Agency during the project period;

(7) Legal authority(ies) under which the grant is awarded;

(8) Approved budget plan for categorizing allocable project funds to accomplish the stated purpose of the grant award; and

(9) Other information or provisions deemed necessary by the granting agency to carry out its respective granting activities or to accomplish the purpose of a particular grant.

The notice of grant award, in the form of a letter, will provide pertinent instructions or information to the grantee that is not included in the grant award document.

Part VI--Additional Information

A. Access To Review Information

Copies of summary reviews, not including the identity of reviewers, will be sent to the applicant PI/PD after the review process has been completed.

B. Use of Funds; Changes

(1) Delegation of Fiscal Responsibility

Unless the terms and conditions of the grant state otherwise, the grantee may not in whole or in part delegate or transfer to another person, institution, or organization the responsibility for use or expenditure of grant funds.

(2) Changes in Project Plans

(a) The permissible changes by the grantee, PI/PD(s), or other key project personnel in the approved project grant shall be limited to changes in methodology, techniques, or other aspects of the project to expedite achievement of the project's approved goals. If the grantee and/or the PI/PD(s) are uncertain as to whether a change complies with this provision, the question must be referred to the CSREES Authorized Departmental Officer (ADO) or NCER Grants Officer for a final determination.

(b) Changes in approved goals or objectives shall be requested by the grantee and approved in writing by the ADO or the grants officer prior to effecting such changes. In no event shall requests for such changes be approved which are outside the scope of the original approved project.

(c) Changes in approved project leadership or the replacement or reassignment of other key project personnel shall be requested by the grantee and approved in writing by the awarding agency official prior to effecting such changes.

(d) Transfers of actual performance of the substantive programmatic work in whole or in part and

provisions for payment of funds, whether or not Federal funds are involved, shall be requested by the grantee and approved in writing by the ADO or the grants officer prior to effecting such transfers, unless prescribed otherwise in the terms and conditions of the grant.

(e) Changes in Project Period: The project period may be extended by the sponsoring agency without additional financial support, for such additional period(s) as the ADO or the Grants Officer determines may be necessary to complete or fulfill the purposes of an approved project, but in no case shall the total project period exceed five years. Any extension of time shall be conditioned upon a prior request by the grantee and approval in writing by the ADO or Grants Officer, unless prescribed otherwise in the terms and conditions of a grant.

(f) Changes in Approved Budget: Changes in an approved budget must be requested by the grantee and approved in writing by the ADO or the Grants Officer prior to instituting such changes if the revision will involve transfers or expenditures of amounts requiring prior approval as set forth in the applicable Federal cost principles, Departmental regulations, or in the grant award.

C. Expected Program Outputs and Reporting Requirements

It is expected that outputs from successful projects will include: the development of watershed management partnerships, increased involvement of community and business sectors in watershed restoration and management, enhanced understanding of regionally-appropriate watershed management practices, increased coordination and partnership between universities and other Federal research and management agencies, and the establishment and maintenance of monitoring and assessment activities including agricultural-water quality interface.

Successful projects should describe how implementation of the project will lead to overall improvements in the quality of water resources. Additionally, projects should describe all measureable outcomes and results and where appropriate, how they will evaluate the effectiveness of extension and outreach programs.

All projects selected for award will be required to deliver metadata and annual reports, a final summary report, a bibliography of publications and training materials resulting from support, and an impacts analysis. All reports will be geo-referenced to the watersheds where activities were performed. The final summary report must include total funding (Federal, matching and other) and a listing of students who worked on the project (report graduate degrees awarded and undergraduates trained).

The grantee must prepare an annual report that details all significant activities towards achieving the goals and objectives of the project. The narrative should be succinct and be no longer than 10 pages, using 12-point, single-spaced type. A budget summary should be attached to this report, which will provide an overview of all monies spent during the reporting period.

All projects funded by CSREES under this program will be required to submit copies of the above reports and materials to the appropriate Regional Water Quality Coordination Project funded under the Integrated Research, Education, and Extension Competitive Grants Program pursuant to AREERA, section 406.

D. Applicable Federal Statutes and Regulations

Several other Federal statutes and regulations apply to grant proposals considered for review and to project grants awarded under this program. For CSREES awards, applicable regulations are those cited in Part VI. D. of the FY 2001 Integrated Research, Education, and Extension Competitive Grants Program - Water Quality RFP published in the Federal Register on March 13, 2001 [66 FR 14774, 14786]. For NCER awards, the applicable regulations are cited in the section entitled REGULATION, GUIDELINES, AND LITERATURE in the Catalog of Federal Domestic Assistance under CFDA No. 66.500, Environmental Protection Consolidated Research.

E. Confidential Aspects of Proposals and Awards

When a proposal results in a grant, it becomes a part of the record of the Agency's transactions, available to the public upon specific request. Information that the Agency determines to be of a confidential, privileged, or proprietary nature will be held in confidence to the extent permitted by law. Therefore, any information that the applicant wishes to have considered as confidential, privileged, or proprietary should be clearly marked within the proposal. The original copy of a proposal that does not result in a grant will be retained by the Agency for a period of one year. Other copies will be destroyed. Such a proposal will be released only with the consent of the applicant or to the extent required by law. A proposal may be withdrawn at any time prior to the final action thereon.

F. Regulatory Information

For the reasons set forth in the final Rule-related Notice to 7 CFR part 3015, subpart V (48 FR 29115, June 24, 1983), this program is excluded from the scope of the Executive Order 12372 which requires intergovernmental consultation with State and local officials. Under the provisions of the Paperwork Reduction Act of 1995, Pub. L. No. 104-13, as amended (44 U.S.C. chapter 35), the collection of information requirements contained in this Notice have been approved under OMB Document No. 0524-0022.

Done at Washington, D.C., this ____ day
of _____ 2001.

COLIEN HEFFERAN,
Administrator,
Cooperative State Research, Education, and Extension Service.

PETER W. PREUSS,
Director,

National Center for Environmental Research,
U.S. Environmental Protection Agency.

